# HAZARDOUS WASTE AND HAZARDOUS RECYCLABLES MANAGEMENT IN ALBERTA

The environmentally sound management of hazardous waste and other wastes includes the 'taking of all practicable steps to ensure that the wastes are managed in a manner that will protect human health and the environment against the adverse effects, which may result from the mismanagement of such wastes'.

The Environmental Protection and Enhancement Act (EPEA) and waste related Regulations are available at www.qp.alberta.ca or call 310-0000 (toll-free across Alberta).

**Pollution Prevention** includes good operating practices, raw material or product substitution, process changes, and the management of waste as a resource through recovery. Pollution prevention addresses all waste streams (air, liquid, and solid emissions including hazardous waste).

The ultimate goal of Pollution Prevention is the elimination of pollution at source.

You need to register

#### WHAT IS HAZARDOUS WASTE?

Hazardous waste (HW) is any substance going for disposal, which – either in the short or the long-term – can be harmful to people, plants, animals, or the environment. A waste is defined as hazardous waste if it shows anyone or more of the following characteristics:

- toxicity,
- · flammability,
- · corrosivity, or
- · reactivity.

The presence of these characteristics in wastes renders them "hazardous". For detail see the *Waste Control Regulation*.

## HAZARDOUS WASTES AND HAZARDOUS RECYCLABLES

The manufacture of goods, the delivery of services, and our activities at home produce unwanted substances called wastes. These include residues from industrial operations such as spent solvents, acids or bases; leftovers from oil refining, the manufacture of chemicals or metal processing; and common household products such as used lube oil, batteries, leftover paints, old drugs, pesticides, or cleaning agents.

When these substances are going for final disposal they are called wastes. However, many can be managed as a resource for further beneficial use and then we known them recyclables.

#### **ALBERTA LEGISLATION**

Legislation and other information relevant to the management of waste including hazardous waste include:

- Environmental Protection and Enhancement Act, Part 9
- Waste Control Regulation
- · Activities Designation Regulation
- Alberta User Guide for Waste Managers.

#### STORAGE OF HAZARDOUS WASTE

#### MANAGING HAZARDOUS WASTE

The person responsible for hazardous waste should implement environmentally sound management practices in compliance with the *Waste Control Regulation* that may include:

- registration with Alberta
   Environment to obtain a personal Identification number (PIN), applicable to off-site management of waste by consignors, carriers, and receivers of hazardous waste),
- completion of a hazardous waste manifest (or a recycle docket applicable to hazardous recyclables) when moving those substances off-site,
- safe containment during transportation and storage,
- recycling, treating or disposing of the waste at approved facilities

Because of greater potential adverse effects to human health or the environment, if mismanaged, all hazardous wastes have to be properly characterized, classified, and managed from "cradle to grave" as required.

### **POLLUTION PREVENTION**

Pollution Prevention (P2) includes the adoption of environmentally management practices to reduce or eliminate the hazardous substance at the source and prevents its release to the environment prior to recycling, treatment, or disposal.

P2 uses techniques such as changing products, raw materials, manufacturing processes, technologies, or energy sources to reduce gaseous, liquid, or solid pollutants entering the environment.

P2 opportunities are generally identified through life-cycle assessments of products or wastes. P2 reduces environmental liability, regulatory burden, and saves money.

#### **OFF-SITE MANAGEMENT OF**

with Alberta
Environment and
obtain a Person
Identification
Number when you
move, transport, or
receive hazardous
waste. Forms at
www3.gov.ab.ca/env/wa
ste/rr/Manifest.html.

If you manage hazardous wastes improperly, you could face a noncompliance penalty

A list of Alberta's approved hazardous waste and hazardous recyclables facilities is available at www3.gov.ab.ca/env/waste/rr/index.html

#### **GUIDANCE**

- Alberta User Guide
- Waste Information Sheets
- Waste Management Information for Businesses that Manage Hazardous Waste/Recyclables

Found at www3.gov.ab.ca/env/waste/industrial was te.htm

Report a spill or environmental emergency to the 24 Hour Environmental Hotline 1 800 222 6514

Alberta Environment Regional Offices may assist you www3.gov.ab.ca/env/re gions/index.html

#### **OR RECYCLABLES**

The person responsible for the storage of HW/HR must do so in a manner that:

- leakages and spills are contained to prevent contamination,
- secondary containment is required for liquid HW/HR,
- the hazardous material is properly identified and labelled,
- incompatible hazardous substances are stored as to prevent contact between them,
- routine inspections can be performed,
- access is restricted to authorized persons
- the site is identified as a hazardous waste/recyclables storage area
- proper equipment to handle emergency situations is available
- designated people are responsible for the site and able to respond to emergencies,
- run-off cannot enter the secondary containment system,
- the storage site is located away from sewer drains, manholes, drainage courses and open water

### MANAGEMENT OF HAZARDOUS WASTES/RECYCLABLES

Hazardous industrial wastes or contaminated soils require management at specific facilities. On-site or off-site recycling, treatment or disposal options are available including out of the Province alternatives.

Alberta hazardous waste/recyclable management system includes:

- 57 facilities approved by Alberta Environment to recycle, treat or dispose of hazardous wastes, and
- 56 facilities approved by the Energy and Utilities Board for oilfield wastes.

Contacts for off-site treatment and disposal including the Swan Hills Treatment Centre are available at www3.gov.ab.ca/env/waste/rr/index.html

#### ALBERTA'S HAZARDOUS WASTE

Management	Quantity*	%
Recycled	174,940	66.4
In Alberta	137,340	52.1
Outside Alberta	37,600	14.3
Treated (SHTC)	5,520	2.1
Disposed of		
AB landfill/deepwell	78,560	29.8
Outside Alberta	4,430	1.7
Total	263,450	100.0

<sup>\* 2006</sup> data on metric tonnes.

#### **RESOURCES AVAILABLE**

Assistance is available from Alberta Environment Regional Offices at environment.alberta.ca/8.html

- Northern Region Edmonton #111, Twin Atria Building 4999-98 Avenue Edmonton, Alberta, T6B 2X3 Tel: 780-427-7617
- Central Region Red Deer #304, Provincial Building 4920-51 Street Red Deer, Alberta, T4N 6K8 Tel: 403-340-7052
- Southern Region Calgary #303, Deerfoot Square Building 2938-11 Street NE Calgary, Alberta, T2E 7L7 Tel: 403-297-7880
- Alberta Used Oil Management Association for used lube oil, filters, and plastic containers www.usedoilrecycling.com/
- Recycle Info Line toll free at 1-800-463-6326 or 780-427-2700
- Pollution prevention
   <u>www3.gov.ab.ca/env/waste/pprevention/index.html</u>
- Environmental Services
   Association of Alberta for waste management services toll free number at 1-800 661 9278 or www.esaa.org